0374: DOES SOCIO-ECONOMIC STATUS INFLUENCE AMPUTATION OUTCOMES?

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Aims: To analyse the effect of socioeconomic deprivation on amputation outcome.Currently 5,000 leg amputations occur annually in England and Wales and have a 50% mortality rate at 2 years.
Methods: All patients undergoing major lower limb amputation from January 2005 to December 2009 were identified from a prospectively maintained vascular database. Patient's postcodes were used to determine socioeconomic status using the ACORN classification system (1 highest group to 5 lowest). Non parametric analysis of data was performed using SPSS version 19.
Results: We identified 354 patients (218 men; 65.5%), median age 68 (IQR 58-78) years. 47 (14.8%) patients were ACORN grade 1, 4 (1.3%) were grade 2, 65 (20.4%) were grade 3, 56(17.6%) were grade 4 and 146 (45.9%) were grade 5. Significant differences were noted for the cardiovascular risk factors; hyper-cholesterolaemia (p=0.034), diabetes (p=0.020), smoking status (p=0.006). No significant differences were noted between classes for gender, type of admission (emergency or elective) or mortality (peri-operative or 1 year death rate) or blood test (haemoglobin, white cells, urea, creatinine, sodium and potassium).
Conclusions: Socio-economic status of amputees does not have an effect on mortality. However, their status does impact on their cardiovascular risk factors, therefore aggressive modification remains imperative.

0414: ASSOCIATION OF ANAEMIA IN PATIENTS WITH DIABETIC FOOT DISEASE

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Aims: Anaemia and inflammation have been shown to play a role in diabetic foot disease. We aim to explore the association between anaemia and inflammation, particularly with stage of diabetic foot disease.
Methods: 175 patients with diabetic foot disease were studied retrospectively. Patients were stratified in groups according to severity of diabetic foot disease according to NICE guidelines; D1 to D4, the lowest risk assigned; D1. Correlation with baseline haemoglobin, C-reactive protein (CRP) and creatinine was evaluated. Longitudinal analysis of stage of diabetic foot disease was analysed.
Results: Haemoglobin was 13.2, 12.3, 11.0 and 9.3 and CRP was 6.1, 22.8, 32.4 and 39.5 in patients stratified to group D1, D2, D3 and D4 respectively ($P<0.0001$). There was an inverse correlation between haemoglobin with CRP ($p<0.001$). Equally, evaluation of disease progression demonstrated that as the diabetic foot deteriorates (D1 *vs.* D4), haemoglobin declines (13.4 *vs.* 9.2) and CRP rises (7.6 *vs.* 41.2) ($P<0.0001$). No difference was found comparing creatinine levels to disease stage. There was no correlation between haemoglobin and creatinine.
Conclusions: Anaemia and inflammation are associated with diabetic foot disease stage. Anaemia was found to be independent of renal function which may be explained by an underlying inflammatory process.

0518: GIANT CELL ARTERITIS; REDEFINING THE ROLE OF TEMPORAL ARTERY BIOPSY (TAB)

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Purpose: TAB remains the definitive diagnostic test for giant cell arteritis, although its usefulness is often questioned. However given the morbidity of both the arteritis and longterm corticosteroid use, TAB may still be beneficial. We have reviewed our experiences with TAB to redefine its indications.
Methods: Between 2004 and 2011, 98 patients underwent TAB. We evaluated their demographics, histological findings and post-operative outcomes.
Results: There were 28 males and 70 females aged between 18 to 92 years. All biopsies were performed under local anaesthetic with positive histological findings in 17% (16/98) cases. Inflammatory marker, ESR was significantly raised in positive biopsies ($P<0.01$), with a sensitivity of 100% and specificity of 81%. Furthermore raised inflammatory markers and strong clinical symptoms were seen in 100% positive biopsies compared with 27% (22/82) negative ones. Out of these 22 patients, 77% had been on steroid suggesting that steroid treatment may have masked 20% (17/82) of the results in the negative group. The size of biopsy specimen did not alter histological outcome. The biopsy result influenced the subsequent management in 5% cases.
Conclusions: We found that while TAB is helpful in some patients, more diagnostic importance should be given to biochemical and clinical parameters.

0534: AORTODUODENAL FISTULAE FOLLOWING ENDOVASCULAR ABDOMINAL AORTIC ANEURYSM REPAIR

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Aim: Aortoduodenal fistula (ADF) following endovascular abdominal aortic aneurysm (EVAR) repair is an exceedingly rare complication as there is no contact between the duodenum and the endograft. The aim of this study is to report an 8 year experience with ADF following elective EVAR.
Methods: Our prospective registry of elective EVAR (January 2004 - 2012, 1283 patients) was assessed to identify patients who developed an ADF.
Results: Six patients (all men; mean age 68.8 years, range 60-75) developed an ADF 18 days to 2 years after successful EVAR. Haematemesis and abdominal pain were the main presenting symptoms. Contrast computed tomography (CTA) confirmed the diagnosis in all cases. Graft infection was the aetiology in 3 patients, 2 ADFs developed due to a type 1A endoleak, no cause has been identified in 1 case. All explanted grafts were macroscopically intact. All patients underwent emergency surgical exploration. Three patients died within 24 hours and 3 are well after 3 to 5 years.
Conclusion: This is the largest case-series of ADF following EVAR to date. ADF is a rare but dangerous complication of EVAR, secondary to infection or endoleak. Prompt diagnosis and intervention are crucial to avoid a fatal outcome.

0550: THE FATE OF PATIENTS REFERRED TO A SPECIALISTVASCULAR UNIT WITH LARGE INFRA-RENAL ABDOMINALAORTIC ANEURYSMS OVER A TWO-YEAR PERIOD

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Introduction: The basic premise in managing patients with abdominal aortic aneurysms(AAA) must be to reduce overall mortality from the disease. Operative mortality is widely reported, but data on patients deemed unsuitable for repair are scarce. The purpose of the present study was to report the fate of patients referred with AAA, to define the proportion deemed unsuitable for surgery and to investigate the reasons for conservative treatment.
Methods: All patients who were referred to a regional vascular centre with large (>5.5cm) infra-renal AAA between 1st January 2008 and 31st December 2009 were included. Patients were classified into two groups; those managed non-operatively, or those offered elective repair. Survival was reported by Kaplane Meier analysis. Multivariate analysis investigated factors leading to non-operative management.
Results: 251 patients with a mean (SD) age of 75(8) years were assessed. Thirty-two(13%) patients were deemed unsuitable for repair, mostly because of medical co-morbidity (16/32). 219/251(87%) patients underwent repair(25/251(10%) open repair 194/251(77%) EVAR)with 1/219(0.5%) 30-day mortality. AAA repair was associated with significantly greater survival ($p<0.001$,log-rank test) at 2years. In multivariate analysis Glasgow Aneurysm Score, female gender and respiratory disease were significant predictors of the decision to treat patients conservatively($p< 0.001$).
Conclusion: Most patients were suitable for surgical intervention with low perioperative mortality. Data on "turndown" rates should be routinely reported to quantify the denominator for operative success.

0593: MULTI-LEVEL BYPASS GRAFTING – IS IT WORTH IT?

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Traditionally multi-level arterial disease has been treated with an inflow procedure only but simultaneous multi-level bypass graft procedures have